

79. *STREPSICEROS KUDU*, Gray.

(P. Z. S. 1894, p. 145.)

80. *TRAGELAPIUS ANGASI*, Angas.

(Sci. P. Z. S. 1892, p. 98.)

Zomba, 1893 (*A. Whyte*).

Mantanas, near Chilomo, Oct. 1894. Presented by Lieut. G. Oliver, R.N.

81. *TRAGELAPIUS SCRIPTUS ROUALEYNI*, Gord. Cumm.

(P. Z. S. 1893, p. 505; 1894, p. 145.)

Two males. Top of Mount Zomba. Presented by Mr. Alfred Sharpe.

Zomba, Dec. 11, 1893 (*A. Whyte*).

82. *MANIS TEMMINCKI*, Smuts.

(P. Z. S. 1892, p. 554; 1894, p. 145.)

2. On Collections of Rodents made by Mr. J. ffolliott Darling in Mashunaland and Mr. F. C. Selous in Matabeleland, with short Field-Notes by the Collectors. By W. E. DE WINTON, F.Z.S.

[Received August 31, 1896.]

(Plate XL.)

I. MR. DARLING'S COLLECTION.

By the kindness of the authorities of the British Museum I have been allowed to work out the Rodents contained in the collection of small Mammals made by Mr. Darling during last year, while engaged in mining work in the Mazoe district, about 4000 ft. above sea-level, on the headwaters of the river of the same name which flows N.E. into the Zambesi.

Collections from Africa with reliable data are always looked forward to with much interest, but I think that this one, from a district which of late has been brought so prominently before us, has very special recommendations.

Every specimen has been most carefully prepared, with date of capture, sex, and measurements, taken in the flesh, recorded, and in almost every case the skull accompanies the skin; in the few cases when this is missing, it is fully accounted for by having been eaten by a hen or some evil beast; in one case the skull alone is sent, the skin preserved with arsenical soap and stuffed with cotton wool, having been eaten and vomited by a cat, was thought to be not worth postage, which, by the way, is 2s. 9d. per lb.

With a further consignment we may hope to receive duplicates

2.



J. Smit del. et lith.

Mintern Bros. imp.

1. GEORYCHUS DARLINGI 2. ACOMYS SELOUSI.

of all the species in spirit, and also more extensive field-notes, which will add very considerably to the value of the collection. As usual, the small mammals seem to be the last important zoological group to come in; for although of course the larger mammals of this region have been long known, and, alas! many well-nigh exterminated, and the birds and insects have been largely collected, the present is the first collection of smaller mammals of any importance numerically that has reached the museums of Europe.

The collection contains 47 specimens, referable to 16 species, all belonging to the family *Muridae*, with the exception of one Dormouse and one Rodent Mole.

It seems strange that no Squirrel is represented, more especially as a Galago is included in the collection. Africa south of the Zambesi is curiously weak in Squirrels, only two species of *Sciurus* being found (one of which, *Sc. cepapi*, is peculiar to this region); neither of these can be called plentiful. This may be accounted for by the absence of any large forests, and perhaps, in a minor degree, by the partiality shown by the natives for small Rodents as food; these animals, owing to their diurnal and climbing habits, being more easily found than rats and mice, stand a very poor chance, especially as the trees which they frequent are mainly confined to the banks of rivers or to clumps on low-lying ground where water most likely lies beneath.

The value of this collection can in no way be measured by its numbers or by the excellent condition in which both skins and skulls are found, though these reflect the greatest credit on the collector; for among the 16 species represented there are 7 that are entirely new to science or that if found elsewhere have developed such well-marked characters in this geographically distinct area as to necessitate the giving of a distinguishing subspecific name. One of these, a *Georychus*, was described by Mr. Thomas last year and named in honour of the collector, and is here figured (Plate XL.), the remaining six are described in this paper. At the same time one or two of these are not in any way confined to the Mashunaland plateau, but have simply been confused with other species, and perhaps, from being rather common, have been considered not worth sending home.

1. *MYOXUS (ELIOMYS) NANUS*, sp. n.

Ad. skin. ♂. Mazoe, Mashunaland, 21 July, 1895.

"Lives in trees and roofs of huts. Native name 'Sindewana.'"—*J. ff. D.*

Collector's measurements, taken in the flesh, of type 95.8.27.4 in Brit. Mus.:—Head and body 86 mm.; tail 72; hind foot 15; ear 14.

Skull: length 24; breadth 13; depth, top of parietal to base of bulla 9.5; breadth of cranium 11; narrowest intorb. 4; nasals 9 × 3; basal length 20.5; hensenion to back of palate 8; palate to foramen mag. 10.5; molar series 3; diastema 5; mandible, depth at coronoid 6.3; tips of incisors to condyle 14.5.

Size much less than *M. murinus*. Colour above uniform grey, the only marking being a black patch commencing among the whiskers and extending to the eye, and continuing on to the eyebrows; the eyelids are black; the upper lips and cheeks white, this colour reaching to immediately beneath the eyes and ears; all the underparts are white; the under-fur above and below dark slate-colour; the hands and feet very small and slender, of not so pure a white as the belly; ears rather large, naked; tail sub-cylindrical, bicoloured, grey drab above and dirty white beneath, the hairs short near the base, very gradually lengthening till at the extremity they are 13 mm. in length; the light hairs of the underside exceed those of the upperside in length and so form a pale margin.

The much larger ears and less bushy tail distinguish this species at a glance from *M. smithi*, Thos., besides the black marks on the cheeks and the greyer colour. As the tips of the hairs in this species are pale and colourless, and only the upper part of the tail shows any drab, it must be quite distinct from *E. kelleni*, Reuvens, as also for the same reason from *E. parvus*, True, with the addition that the under-fur of the cheeks and throat is dark slate-colour and not white. The ears are certainly not small for a Dormouse and there is no hair on them which is perceptible to the naked eye, so there is no colour on the borders which both these species are described as having. I may say that the measurement of the ear is taken from the notch, as in all specimens in this collection.

Mr. Darling writes:—"I have been telling them (the natives) to get me some more dormice, but they say all those animals are gone away: I know they are scarce, but I may be able to get some. One hut I had on a bushy hill, a little chap used to live inside, and come down quite close and watch me reading as I lay in bed at night; if they eat insects he may possibly have come to catch them at the candle, but I never saw him do so."

2. GERBILLUS AFER, Gray.

Eight specimens of both sexes and of various ages taken at Mazoe, Mashunaland, between the months of April and September, 1895.

"Fairly common. Native name 'Bendy.'"—*J. ff. D.*

Collector's measurements taken in the flesh, adult ♂:—Head and body 155 mm.; tail 166; hind foot 32; ear 20.

This is a nice series, showing the various forms of colour from grey to foxy red. The bright colour on the cheeks and along the whole length of the body immediately above the white of the underparts makes its appearance at a very early age, but may not reach the dorsal region till long after the animal is full-grown and the teeth worn so as to show the complete pattern of the enamel of the first molars, and the animal has reared young ones; thus it seems probable that many never assume the red colouring at all, as there are specimens almost black on the back with well-

worn teeth, while others almost red-fawn have their teeth very much less worn. In fact from this series it is impossible to say whether age, sex, or season has much to do with the varying colour, though there is little doubt that the immature animals are invariably dark grey, showing the red first on the cheeks and along the sides. The tail varies in length, but is generally somewhat longer than the head and body.

3. OTOMYS IRRORATUS, Bts.

α. Ad. sk. ♂. Mazoe, Mashunaland, 8 January, 1895.

β. Ad. sk. ♂. " " 4 August, "

γ. Ad. sk. ♂. " " 5 " "

Collector's measurements, taken in the flesh, of α:—Head and body 197 mm.; tail 117; hind foot 28; ear 22.

"Common in marshes. Native name 'Nappy.'"—*J. ff. D.*

These specimens all agree with the Cape form in the general gold and dark brown grizzled colour.

. MUS CHRYSOPHILUS, sp. n.

Ad. sk. ♀. Mazoe, Mashunaland, 14 August, 1895 (type).

" ♂. " " 14 " "

" ♂. " " 15 " "

" ♂. " " 19 " "

" ♂. " " 17 January, "

" ♂ imm. Mazoe, Mashunaland, 16 January, 1895.

"Trapped in grass. Native name 'Mäché.'"—*J. ff. D.*

Collector's measurements, taken in the flesh, of type 95.11.3.23 in Brit. Mus.:—Head and body 146 mm.; tail 168; hind foot 28; ear 19.

Skull: greatest length 38 mm.; breadth 18; breadth of brain-case 15; nasals 14.5×4.5; frontals 12; parietals 6.8; interparietals 4×9.5; basal length 32; hensenion to back of palate 16; palate to foramen mag. 12.5; incisive foramina 9×2.5. Upper molar series 6; diastema 9.5; depth, parietals to bulla 12; mandible, height at coronoid 11; incisor-tips to condyle 24.

The whole of the upper parts bright reddish-fawn, strongly sprinkled with black hairs; cheeks and sides and thighs rather paler, the dark hairs being less numerous and of a browner tint; the whole of the underparts, including the feet and hands, almost pure white; the colours of the upper and under sides being clearly defined. *All the hairs above and below dark slate-colour basally.* Ears moderate and naked, save for a few scattered rufous hairs. Tail almost naked, but with a few very short adpressed hairs, which increase in number and length towards the tip; scales in rings 10 to 10 mm., shining like mica in some lights, the basal half is indistinctly bicoloured, brown above, whitish beneath, the terminal portion unicoloured brown.

Allied to *M. kaiseri*, Noack, but very distinct in colour.

This handsome Rat is not confined to the Mashunaland plateau,

as the Museum has lately received specimens from the Transvaal collected by Dr. Percy Rendall, and it is possible that its range may extend still further south, as from the very little attention the small mammals have received since the time of the early discoverers, and owing to the bad state of preservation of many of the original types, this species has been overlooked.

5. *MUS AURICOMIS*, sp. n.

α. Ad. sk. ♂. Mazoe, Mashunaland, 9 August, 1895.

β. Ad. sk. ♂. " " 19 " " (type).

γ. Ad. sk. ♀. " " 19 " "

"Testes larger than those of the larger species" (*M. chrysophilus*).—*J. ff. D.*

Collector's measurements, taken in the flesh, of type 95.11.3.21 in Brit. Mus.:—Head and body 113 mm.; tail 147; hind foot 24; ear 17.

Skull: greatest length 31; breadth 15; across brain-case 13.5; nasals 13 × 4; frontals 9.5; parietals 5; interparietals 4 × 9; basal length 26.5; hensenion to back of palate 13.5; palate to foramen mag. 10; incisor foramina 7.5; upper molar series 5.2; diastema 7.5; depth, parietals to bullæ 11.1; mandible, height at coronoid 8.5; incisor-tips to condyle 20.

The whole of the upper parts yellow-fawn, strongly sprinkled with black hairs; cheeks and sides and thighs almost pure fawn, showing considerable contrast to the darker dorsal region; the whole of the underparts, including the feet and hands, almost pure white; the colours of the upper and under parts being clearly defined. The bases of the hairs of the back slate-colour (paler than in *M. chrysophilus*), those of the underparts being pale grey only at the extreme bases. Ears moderate and naked, save for a few yellow hairs. Tail almost naked, but with a few very short adpressed hairs, which increase in number and length towards the tip; scales in rings 11 to 10 mm., shining like mica in some lights, the basal half is indistinctly bicoloured, brown above, whitish beneath, the terminal portion unicoloured brown.

Closely resembling *M. chrysophilus* in general characters, but distinctly smaller; the colour is less rufous and more golden, with more contrast between the colours of the back and sides, and whereas the under-fur of *M. chrysophilus* is dark slate above and beneath, in this species it is grey-slate above and the underparts have this colour only at the bases of the hairs, or the hairs may be white throughout.

This Rat no doubt is closely allied to *Mus namaquensis*, A. Smith, described in the S. Afr. Quart. Journ. vol. ii. p. 160 as *Gerbillus namaquensis*; it is distinguished, however, by its shorter ears and longer tail; the fur does not seem so soft, and is shorter. From *M. pædulcus*, Sund., it is distinguished by the coarser scales on the tail and the cusps of the molars are set in straighter cross rows, the teeth broader.

6. *MUS RATTUS*, Linn.

α. Ad. sk. ♀. Mazoe, Mashunaland, 18 May, 1895.

β. Im. sk. ♂. " " 18 January, 1895.

" Taken in the house, very common. Native name 'Gonzo.'—*J. ff. D.*

Collector's measurements, taken in the flesh, of α:—Head and body 188 mm.; tail 220; hind foot 34; ear 25.

I cannot separate these two specimens from the brown form of *M. rattus*. It is the common House-Rat of the district.

7-9. *MURES*, spp.

There are three Mice in the collection belonging certainly to two and possibly to three distinct species, which at present I will not venture to determine. The two larger ones, male and female, differ markedly in colour, one being nearly black and the other brown, but they agree fairly in the skulls and dentition as well as can be judged, allowing for the great difference of age which exists between them; they belong no doubt to Mr. Thomas's group which he has so well named "multinammate." The third, a male, may possibly be *M. mariguensis*, A. Smith, and belong to the group which has 3-2=10 mammae; but until further specimens are obtained I would rather not assign any particular name to it.

10. *ARVICANTHIS DOHSALIS*, A. Smith.

α. Ad. sk. ♂. Mazoe, Mashunaland, 30 January, 1895.

β. Ad. sk. ♀. " " 13 " "

γ. Juv. sk. ♂. " " 13 August, 1895.

" Trapped in grass; not uncommon. Native name 'Chewangaranga.'—*J. ff. D.*

Collector's measurements, taken in the flesh, of α:—Head and body 130 mm.; tail 134; hind foot 28; ear 17.

This species seems very constant in colour throughout its extensive range, and there is little difference between the old and young, the latter being generally more rufous, the inner side of the ears more thickly clothed with short reddish hairs, and the tail more thickly covered with hair so as to almost hide the scales. The clearly-defined narrow black dorsal stripe seems never to vary. The fifth finger is so small that unless examined closely there appear to be only three toes on each of the feet; this character is shared by *A. barbarus*, L., and *A. pulchellus*, Gr.

11. *ARVICANTHIS PUMILIO DILECTUS*, subsp. n.

α. Ad. sk. ♂. Mazoe, Mashunaland, 2 August, 1895 (type).

β. Sen. sk. ♂. " " 5 " "

γ. Ad. sk. ♂. " " 1 " "

" Not uncommon. Native name 'Shanchey.'—*J. ff. D.*

Collector's measurements, in flesh, of type 95.11.3.25 in Brit. Mus.:—Head and body 106 mm.; tail 82; hind foot 20; ear 14.

Skull: greatest length 27; breadth 14; basal length 23.5; hensenion to back of palate 11.5; palate to foramen mag. 10;

length of upper molar series 4·8; diastema 7; mandible, height at coronoid 9; tips of incisors to condyle 18.

Dorsal stripes arranged as in *A. pumilio*, Sparrm., but all the stripes more clearly defined; the general colour darker and more dusky above and below. A dark stripe commences between the eyes; immediately behind the ears it widens out and branches into two stripes, which join again just above the base of the tail; the median space from the neck to near the tail is more rufous than the body-colour; outside the two dorsal black stripes, from the neck to the rump, are two pale buff stripes, and outside these again two black stripes commencing at the back of the ears and running to the base of the tail; all the stripes are subequal in width; outside these stripes the fur is a dark rich mixture of red-brown and black, the colour gradually fading to the paler underside, which is dusky, strongly washed with orange; the feet share the general much darker grizzled colour as compared with *A. pumilio typicus*.

By the measurements it will be seen that this species is considerably smaller than its Cape ally, and of about the same size as the brightly-coloured *A. pumilio diminutus*, Thos., of British E. Africa.

12. *DASYMYS INCOMTUS FUSCUS*, subsp. n.

α. Sen. sk. ♀. Mazoe, Mashunaland, 4 August, 1895.

β. Ad. sk. ♂. " " 1 " "

γ. Ad. sk. ♂. " " 2 " " (type).

"Native name 'Garu.'—*J. ff. D.*

Collector's measurements, taken in the flesh, of type 95.11.3.14 in Brit. Mus.:—Head and body 157 mm.; tail 146; hind foot 32; ear 21.

Skull: greatest length 37 mm.; breadth 20·2; basal length 35; henschion to back of palate 20; palate to foramen mag. 13; length of upper molar series 7·3; diastema 12·2; mandible, height at coronoid 14; incisor-tips to condyle 27.

Size and general characters as in the type species, but differing in colour, being of a uniform sooty black, only slightly grizzled with yellow. Upper incisors deep red-orange; lower incisors brownish honey-colour.

There is considerable difference in the ages of these three specimens, the female being evidently very old, but all agree most perfectly in colour, and there can be no doubt this is a well-marked geographical race and must be distinguished by name.

13. *GOLUNDA FALLAX*, Pet.

Skull only received.

"♂. Mazoe, Mashunaland."—*J. ff. D.*

14. *SACCOSTOMUS MASHONÆ*, sp. n.

α. Ad. sk. ♂. Mazoe, Mashunaland, 13 June, 1895 (type).

β. Ad. sk. ♂. " " 5 May, 1895.

γ. Ad. sk. ♀. " " 19 " "

γ. Juv. sk. ♂.	Mazoe, Mashunaland,	20 August, 1895.
δ. Ad. sk. ♂.	„ „	5 September, 1895.
ε. Ad. sk. ♂.	„ „	7 „ „
ζ. Ad. sk. ♀.	„ „	7 „ „

Collector's measurements, taken in the flesh, of a :—Head and body 125 mm.; tail 9; hind foot 19.

“Common. Native name ‘Nōta.’”—*J. ff. D.*

This Rodent was described by Mr. Oldfield Thomas in the *Ann. & Mag. Nat. Hist.* ser. 6, vol. xvi. 1895, p. 239; it is distinguished by the clearly-defined triangular pure white spot on the top of the head. The young appear to be mouse-grey and much darker than the drab-coloured adult.

II. MR. SELOUS'S COLLECTION.

Since writing the account of Mr. Darling's collection, the following Rodents, collected and presented to the British Museum by Mr. F. C. Selous, have been received. The collection, containing nearly fifty specimens, was made at Essex Vale, about 4500 feet above sea-level, near Buluwayo in Matabeleland, between the months of August and October 1895, and should have reached the Museum in the beginning of this year, but, owing to the disturbances in the lands of the South African Chartered Company, the case containing it was detained at Mafeking for more than six months.

Besides additional examples of the two new species of *Mus* described above in Mr. Darling's collection, there are specimens of two undescribed species—an *Acomys*, which I have great pleasure in naming in honour of the collector, and a *Georychus*, named in honour of the “mighty hunter”; the latter animal is of particular interest, as it clearly shows the geographical distinction in the fauna of these two adjoining districts.

Mr. Selous had the advantage of the services of Mr. J. Notman in collecting and preserving these specimens; the skins are all of a uniform pattern, thus facilitating comparison enormously, and the skulls are in the most perfect state. I can safely say that this is the best preserved African collection that has ever been received by the British Museum. We may hope to have the distinguished collector among us before long, as I am glad to say he is now on his way home, after the gallant defence of Buluwayo. A second collection which he had hoped to bring with him was unfortunately burnt by the Matabele at the outset of the rebellion, with the whole of the contents of the pretty homestead of Essex Vale.

1. GERBILLUS LEUCOGASTER, Pet.

6 skins, 7 skulls: 4 ad. ♂, 2 ad. ♀. Sept. and Oct.

“Trapped by a stream; common.”—*F. C. S.*

There can be little doubt that these belong to Prof. Peters's species; unfortunately they are rather young, none of them having the teeth much worn. In contrast to the series of *G. afer* in

Mr. Darling's collection where no two are exactly alike in colouring, these are all absolutely identical, soft grizzled fawn-yellow.

2. *MUS RATTUS*, L.

2 skins and skulls, ♂ ♀.

"Trapped in house; very common."—*F. C. S.*

These two agree with those received from Mr. Darling.

3. *MUS CHRYSOPHILUS*¹, mihi.

8 skins, 9 skulls: 4 ♂, 3 ♀, 1 not sexed. Aug.—Oct.

"Trapped in rocky kopje, common; but one taken near house; carrot for bait; very common."—*F. C. S.*

These specimens agree in every particular with those described above from Mashunaland, and we may hope that Essex Farm will turn out a gold-mine, as all the specimens yet received have come from gold-bearing districts.

4. *MUS AURICOMIS*², mihi.

3 skins with skulls: 2 ♀, 1 ♂. Sept. and Oct.

"Trapped in Rocky kopje."—*F. C. S.*

Agreeing perfectly with the Mazoe animals described above.

5. *Mus*, sp.

6 skins with skulls. Sept. and Oct.

"Trapped near house; carrot for bait; common."—*F. C. S.*

These Mice are very uniform in colour, of a more yellow-tinted colour than one of about the same size in Mr. Darling's Mazoe collection, and differing in the shape of the skull, but topotypes of the earlier described species are necessary before we can properly unravel this difficult group. They are of the multinaminate group.

6. *MUS NATALENSIS* (?).

6 skins and skulls: 2 ♀, 4 ♂. Aug.—Oct.

"Trapped in Kaffir garden by a stream; common."—*F. C. S.*

Unfortunately the mammæ are not traceable in either of the females.

7. *ACOMYS SELOUSI*, sp. nov. (Plate XL fig. 2.)

4 skins, 5 skulls: 2 ♀, 1 ♂, 1 not sexed.

"No. 33, Mouse, ♂, Matabeleland; 8 Oct. 1895. Trapped in rocky kopje."—*F. C. S.*

Collector's measurements taken in the flesh:—H. & b. 83 mm.; tl. 92.5; h. f. 16.5; ear 14.

Upper parts smoky rufous-brown or coffee-colour, more smoky on the face and darker on the dorsal region; clear chestnut-brown on the cheeks, sides, and a patch behind each ear. Whole of the

¹ Above, p. 801.

² Above, p. 802.

underside including the upper lip and feet, pure white, line sharply defined; ears and tail brown, naked, the latter paler on the underside.

Type, No. 33, ♂, Essex Farm, Matabeland; 8 Oct., 1895.

General colour much like *Mus sylvaticus*, but with the smoky bloom peculiar to the genus.

Skull, old male:—Greatest length 25·5; br. zyg. 12·5; br. brain-case 11·3; nasals 10·5 × 3; interpar. 3 × 8·5; basal length 21; bk. of ins. to bk. of pal. 12·5; pal. to foram. mag. 7; ins. foram. 5·8; upper molar series 4; outside m.1 1·6; inside m.1 3·1; diastema 6·5. Mandible: gr. length (bone) 13·1; to tip of incisors 16.

Near *A. wilsoni*, Thos., but larger.

8. GEORYCHUS NIMRODI, sp. n.

4 skins, 1 ad., 3 juv.; 5 skulls, 2 ad., 3 juv. All taken in Nov.

Size much as in *G. hottentottus*, Less., and *G. darlingi*, Thos.: differing from the former in its drab colouring, and from the latter in the absence of the triangular white patch on the nape. The skull is at once distinguished from its allies by the ascending processes of the premaxillaries not extending backward beyond the nasals, so that the suture between these bones and the frontals forms a simple slightly bowed line, very distinct from the complicated dove-tail pattern found in most of the *Georychi*. The sagittal crest is only faintly developed, the interparietal bone being rounded. The zygomata are not so much bowed out anteriorly as in *G. hottentottus*, and in this it resembles *G. darlingi*, as also in the thickened outer walls to the anteorbital foramina. In the type specimen these foramina are very small, on one side indeed being little more than a pin-hole, but this is a somewhat variable character in this species. From the lachrymal projection the skull recedes abruptly to the narrowest part of the constriction, with no posterior lateral inflation of the frontals in the interorbital region. The postaural aperture is rather wide, the back of the palate being slightly cut away on either side, leaving a projecting point in the middle line; the posterior opening of the alisphenoid canal is larger than in *G. hottentottus*.

I select as the type a specimen marked by the collector, "No. 46, Mole, ♂, caught 18 Nov., 1895. Head and body 147 mm., hind foot 24·5. Kaffir garden, only appeared on surface since rainy season began. Locality, Essex Farm, Matabeland."—*F. C. S.*

Measurements of skull of type: basilar length 31; greatest breadth 27.

This new species is unquestionably nearly related to *G. darlingi*, but outwardly as well as craniologically the two forms are easily distinguished.